

information losses” the traffic light can display red to indicate a poor expected image quality. “[I]f the calculated system parameters generate artifacts in the next acquired image,” the traffic light could display a yellow light to indicate potential problems with the image quality. And, “if the selected system parameter setting appears useful,” the traffic light could display a green light, to indicate that the desired image quality is expected to be achievable without introducing negative effects into the image. Specification, Page 8, lines 12-18.

The Examiner contends this feature is disclosed by Green, stating that “(consecutive images are taken with different desired system parameters . . .) and outputted to the user (231, 241).” Detailed Action, item 3, page 3. As the Examiner notes, Green can acquire images “at different Z-positions/wavelengths” and output them to the user. However, Green does not disclose or suggest calculating or displaying and “an image quality expected,” as recited by claim 1. Rather Green merely describes an “information handling system 200 compris[ing] a graphics monitor 231 and a video monitor 241.” Green, col. 7, lines 29-31. Green does not describe or suggest providing an indication of “the image quality expected . . . in the next acquired image,” as recited by claim 1.

Furthermore, Applicant respectfully submits that neither Green et al. nor Tsien teaches or suggests “inputting at least one image quality feature . . . [and] converting the at least one image quality feature into at least one system parameter,” as recited by claim 1.

The Examiner contends that Green’s description of changing “both the Z-position and the wavelength” is analogous to “(inputting image quality feature which directly relates bleaching behavior). Detailed Action, item 6, page 6. Applicant respectfully submits that the Examiner has misinterpreted the features of claim 1 and, therefore, respectfully disagrees with the Examiner’s contentions.

Claim 1 recites the step of “inputting at least one image quality feature.” The image quality feature is then “convert[ed] . . . into at least one system parameter.” Thus, the user of the claimed invention is not required to know which system parameters correspond to a specified image quality feature; rather, the user can simply specify an image quality feature, and the system converts the feature to the necessary system parameters. *See* Specification, page 4, lines 24-27 (“For example, a calculation is made as to which system parameters . . . need to be modified in order to yield the image quality features that are to be set” and “[T]he user inputs the manner in which the acquired image is to be modified . . . in terms of its image quality features.”).

In contrast, Green does not teach or suggest inputting an image quality feature and then converting that image quality feature into a system parameter of the scanning microscope. Rather, Green merely describes directly inputting changes to system parameters such as wavelength and Z-position. There is no teaching or suggestion, however, of inputting the image quality feature and having the control computer convert that feature to a set of system parameters.

Tsien does not cure the deficiencies of Green et al. Tsien merely describes the use of a confocal microscope to image a specimen, but does not teach or suggest inputting an image quality feature or converting that feature into a system parameter by a control computer.

Independent claim 15 recites a scanning microscope that includes the features of a control computer and an operating console for inputting an image quality feature after an image has been acquired, whereby the image quality feature can be converted by the control computer into a system parameter of the scanning microscope that can be set and the control computer can calculate and output an indication of the image quality expected to be achievable for the inputted image quality feature. For at least the reasons discussed above with respect to independent claim 1, Applicant

respectfully submits that a combination of Green et al. and Tsien would not teach or suggest those features of independent claim 15.

Applicant respectfully requests reconsideration and withdrawal of the rejections to claims 1, 5-8, 10, 15, 16, 19, and 20 under 35 U.S.C. § 103(a) in view of Green and Tsien.

Rejections under 35 U.S.C. §103(a) (Cable et al. and Tsien)

Claims 11-14, 17, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cable (US 6,614,452) in view of Tsien. Claims 11-4, 17 and 18 have now been cancelled, rendering the rejections moot.

Allowable Subject Matter/new claims

Applicant appreciatively acknowledges the Examiner's indication that claim 4 would be allowed if re-written in independent form. New independent claim 21 has accordingly now been added reciting the limitations of allowable claim 4 and its base claim 1. New independent claim 24 has also been added similarly reciting the limitations of allowable claim 4 along with the limitations of existing independent apparatus claim 15. Dependent claims 22-23 and 25-26 have also been added depending from new claims 21 and 25, respectively, and respectively reciting the limitations of existing dependent claims 5 and 8. It is respectfully submitted that new claims 22-26 are patentable over the cited prior art for at least the same reasons as allowable claim 4 is.

CONCLUSION

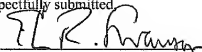
Each and every point raised in the Office Action dated September 13, 2006 has been addressed on the basis of the above amendments and remarks. In view of the foregoing it is believed that remaining claims 1, 4-10, 15-16, 19 and 20, as well as new claims 21-26, are in condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Dated: December 13, 2006

Respectfully submitted

By



Erik R. Swanson

Registration No.: 40,833
DARBY & DARBY P.C.
P.O. Box 5257
New York, New York 10150-5257
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicants